

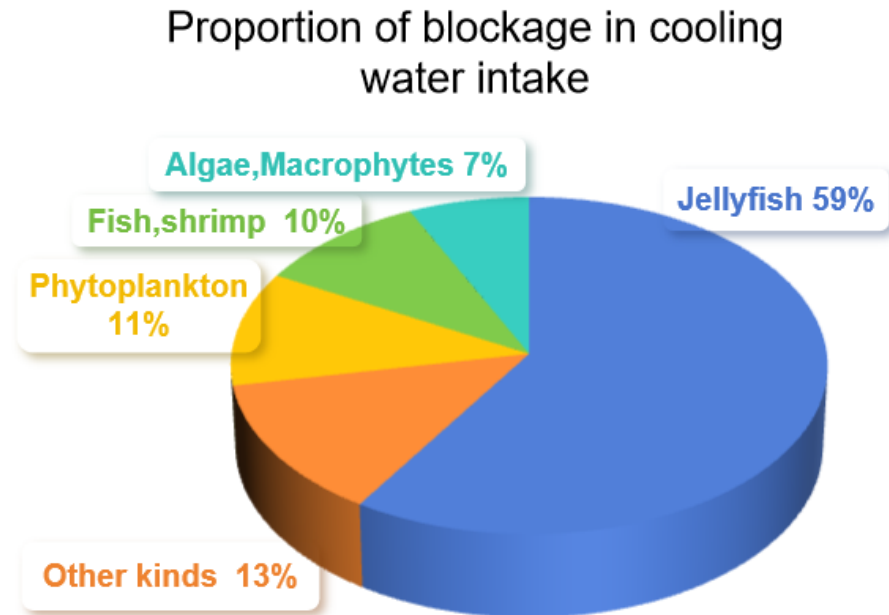
Study on the feeding of *Palaemon gravieri*
on *Aurelia aurita* polyps

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- 01 *Aurelia aurita* and NPCSSs
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Aurelia aurita and NPCSSs

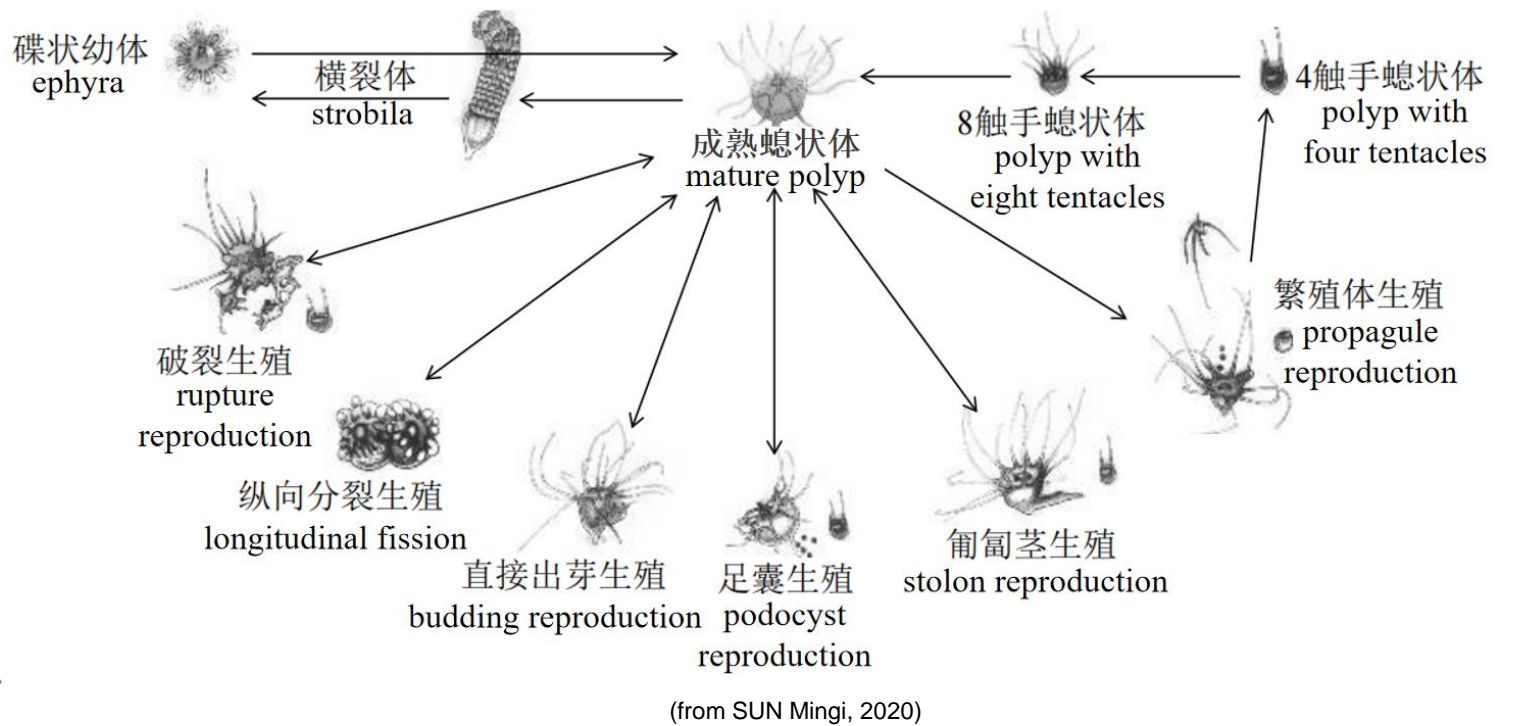
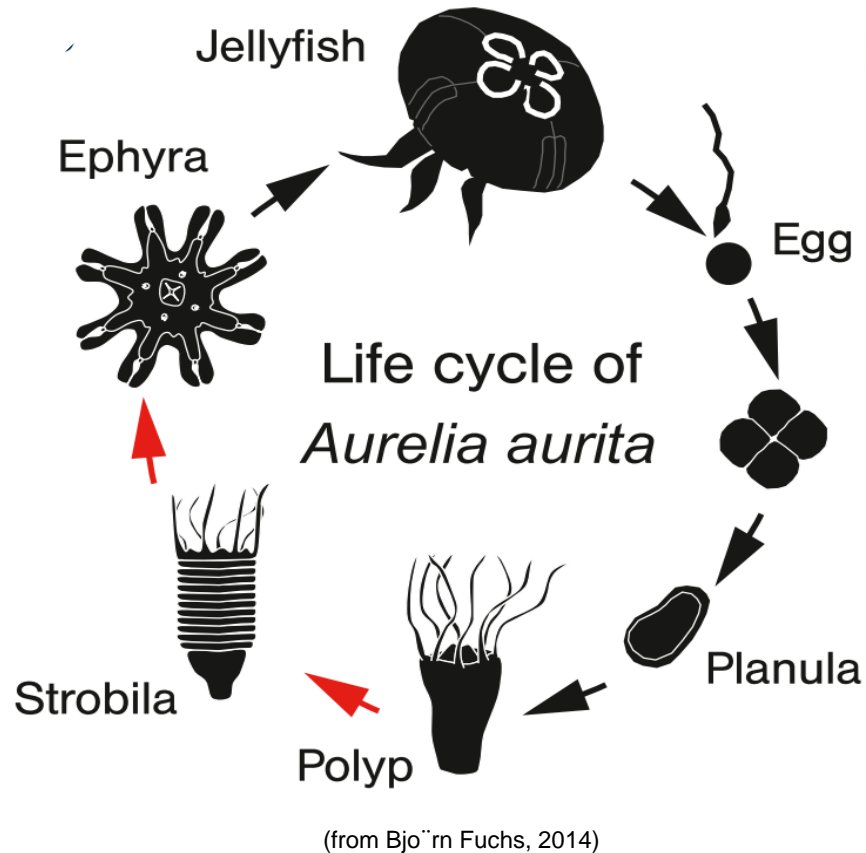
Cooling source water intake(NPCSSs) is affected by jellyfish bloom



Biological control method of jellyfish

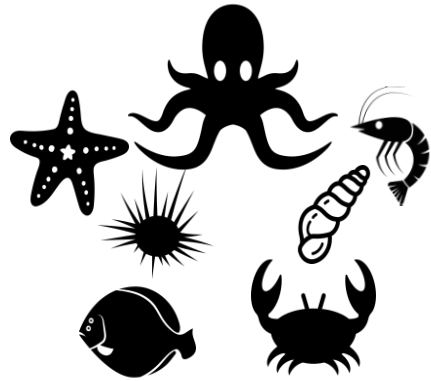
Aurelia aurita and NPCCs

The life cycle of *Aurelia aurita*



Reducing the biomass of polyps

Aurelia aurita and NPCss



macrobenthos

predation



jellyfish polyps

Environmentally friendly ;
Sustainability ;
High efficiency ;
Safety

Predator screening

Screening of macrobenthos in Bohai Sea

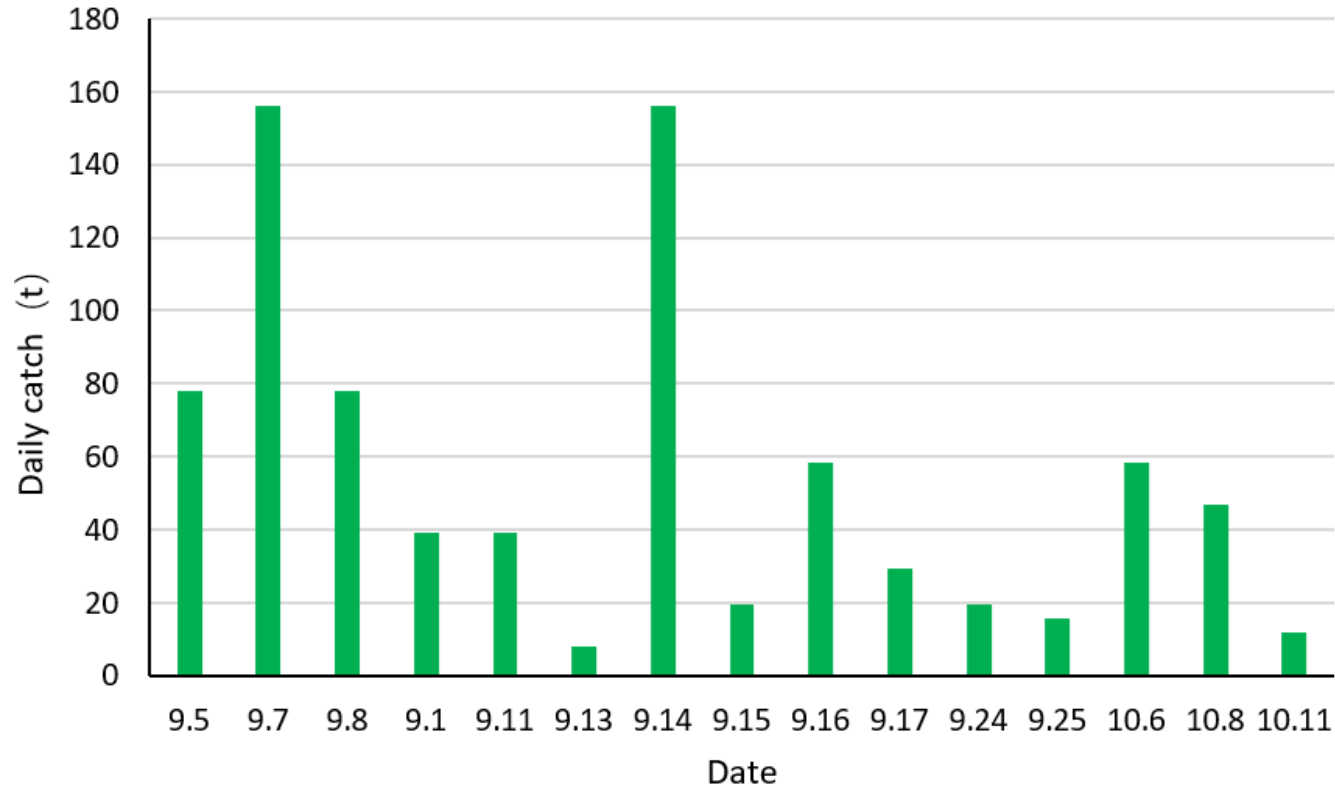


more than 30 species of Polychaetes,
Crustaceans, Mollusks, Echinoderms,
Echinoderms and Fish

Palaemon gravieri (Yu)

Predator screening

The catch of *P.gravieri* in the fishing port of Changxing Island in autumn



Total: 813 (t)



Feeding studies

Species tested



P. gravieri

- ❑ 40mm ~ 70mm
- ❑ hunger treatment for 24 hours



A. aurita polyps

Feeding studies

Study on the feeding rate of *P. gravieri* on the polyps



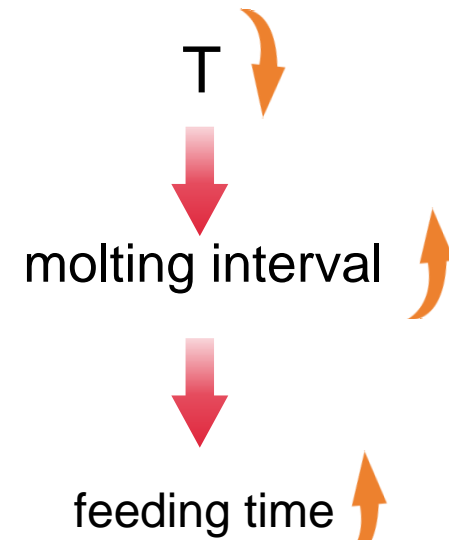
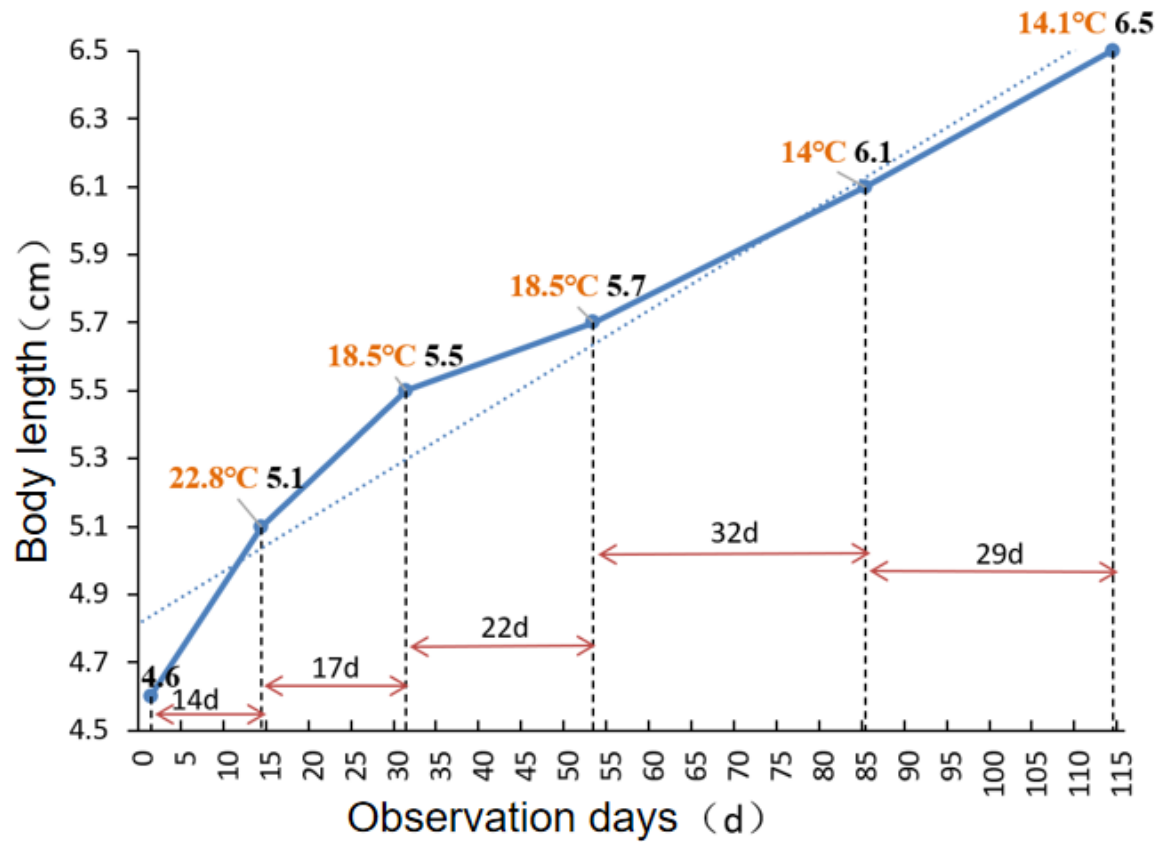
Feeding studies

Study on selective feeding of *P.gravieri* to polyps



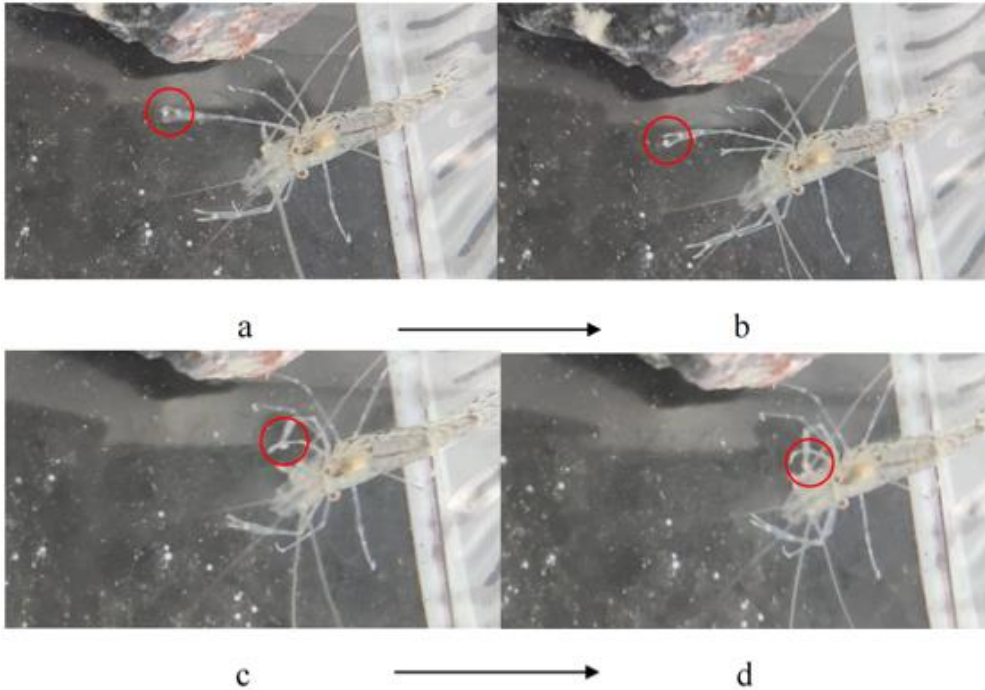
Research result

The molting phenomenon of *P.gravieri*



Research result

Feeding behavior of *P. gravieri*



- Clamped with a shrimp clamp and **tore it down**
- Put **directly** into the mouth for feeding
- Continue to **wave the shrimp clamp** for exploration

When the number of polyps is large, they are fed intermittently. The duration of the interval is not fixed, and it is active around the polyp plate during the interval.

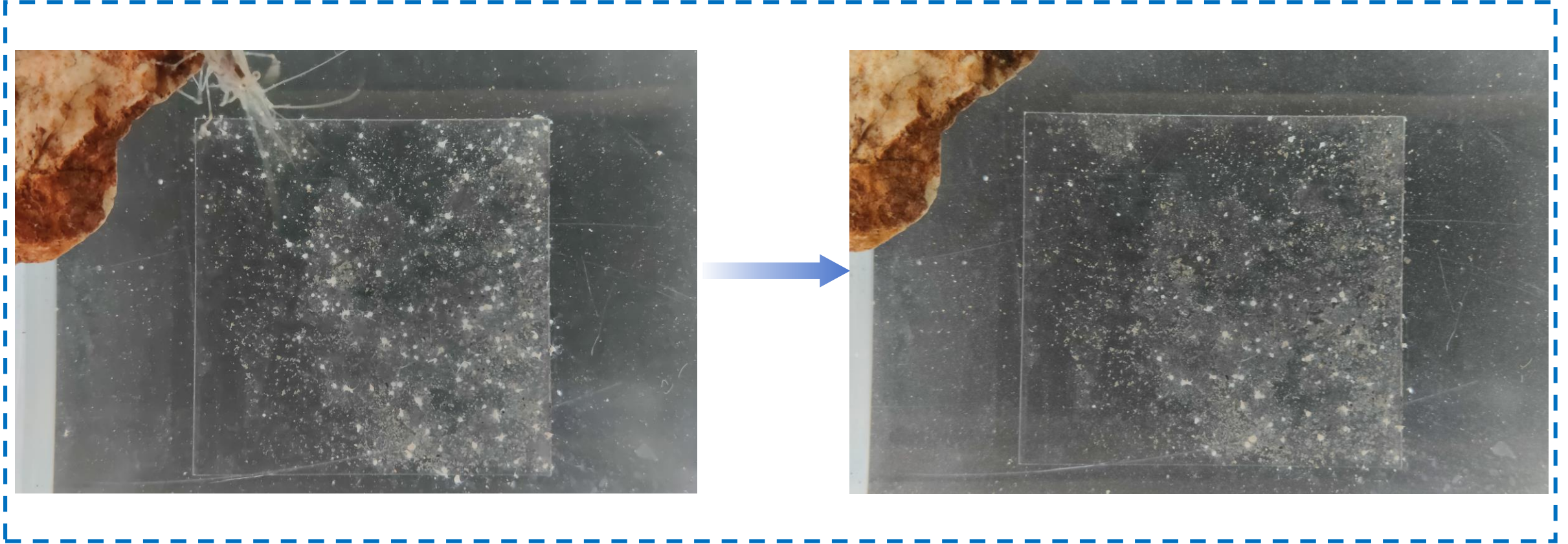
Research result

Video recording of feeding of *P. gravieri*



Research result

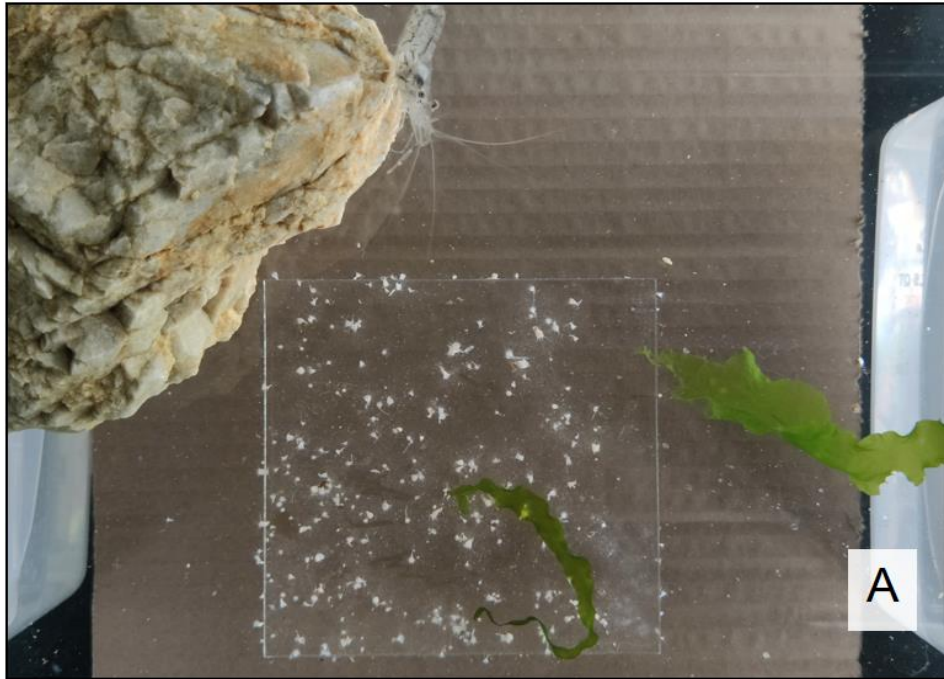
Feeding rate of *P. gravieri*



- ◆ The average feeding rate was **5ind/s**;
- ◆ The highest feeding rate was 198 individuals in 18 minutes, with an average of 11ind/min.

Research result

Selective feeding of *P. gravieri*



- ◆ The feeding order is not fixed, the feeding willingness of the these is not strong, and the feeding amount of both is less.

Research result

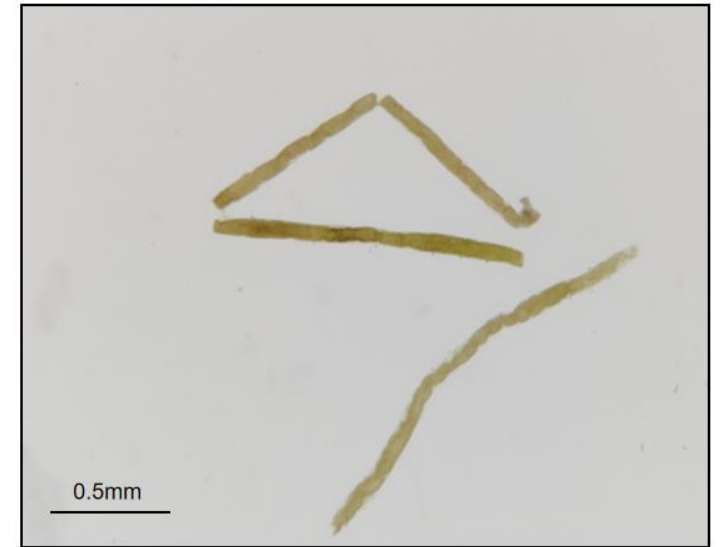
Feces of *P.gravieri* after feeding



After ingesting the *Artemia nauplii*



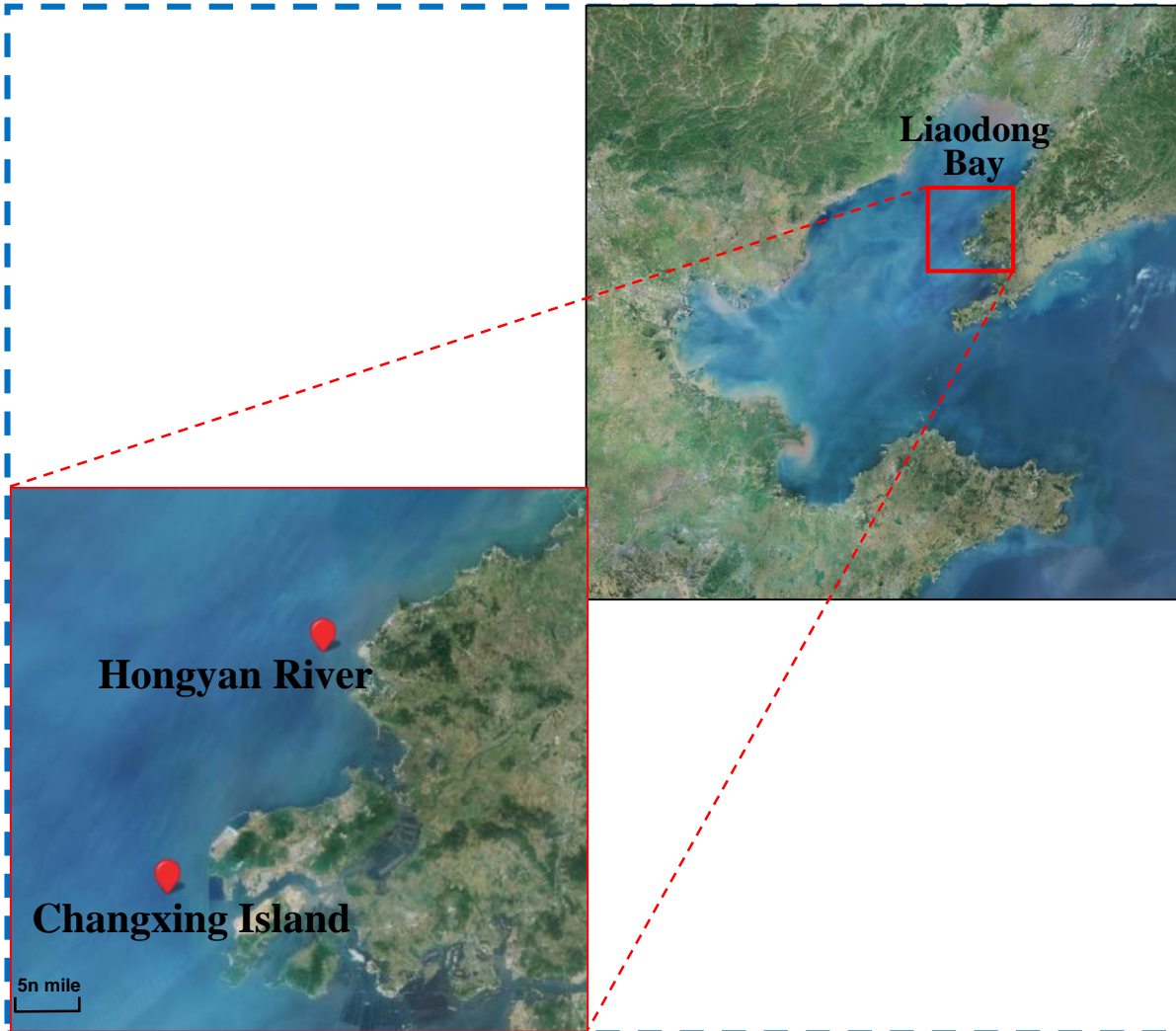
After ingesting the *polyyps*



After ingesting the seaweed

Research result

The area of *P. gravieri*

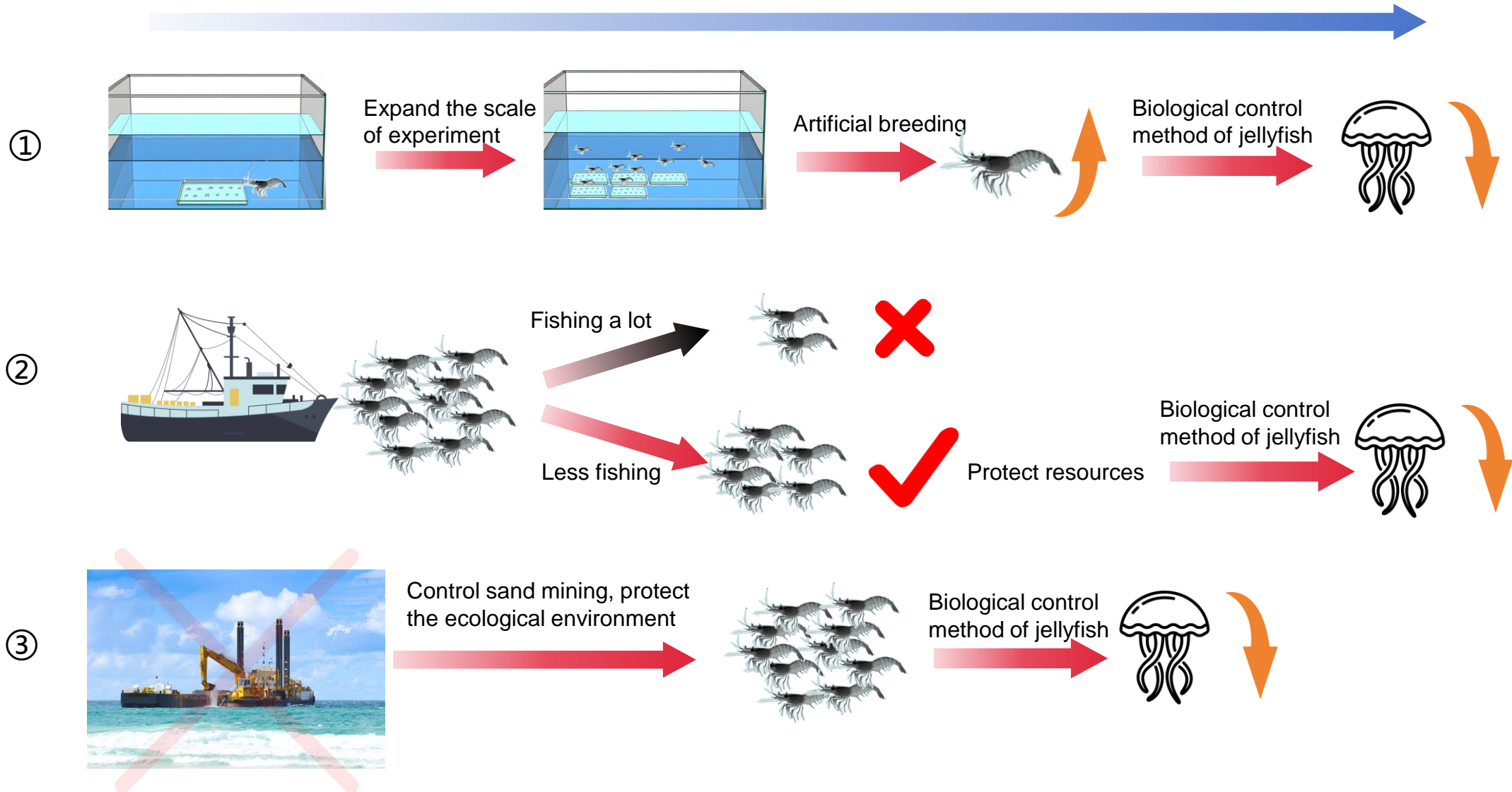


The feeding difference of *P. gravieri*

Sea areas	Whether to feeding polyps
Hongyan River Nearshore waters	the feeding willingness is strong
Changxing Island Nearshore waters	Its feeding is accidental

The P. gravieri need to adapt to the environment of polyps, before feeding on polyps.

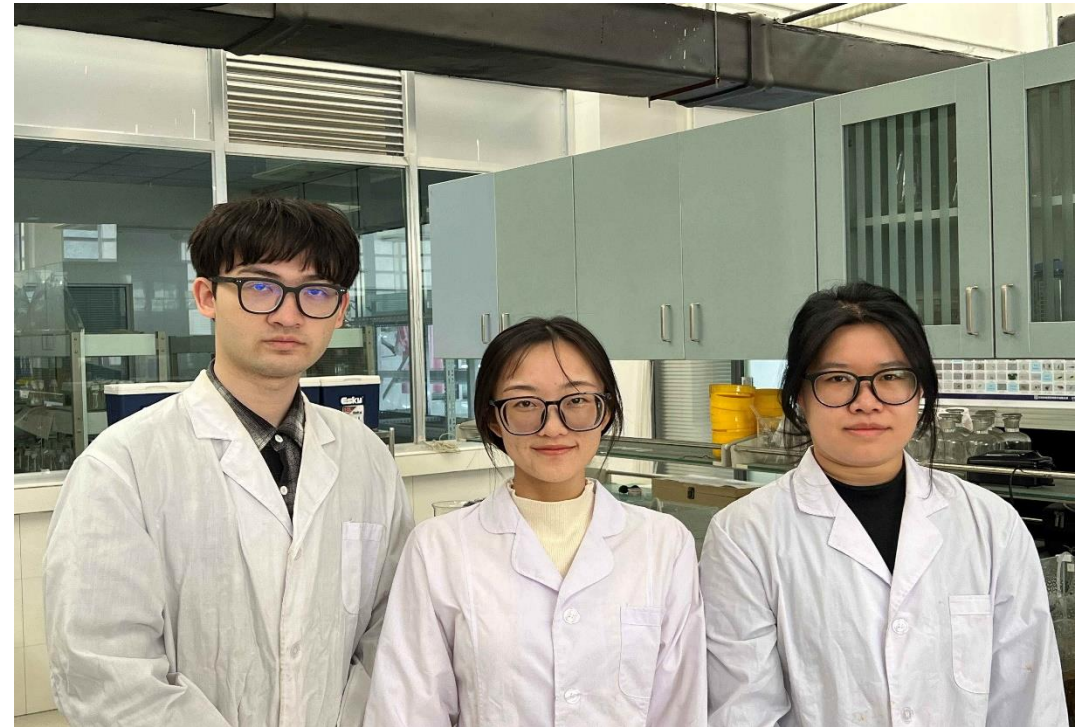
Prospect



THANK YOU!

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